

REMARKS**1. Claim Amendments.**

The claims have been reviewed and amended for clarity. More specifically, the claims have been amended to place them in better English and to better conform to USPTO preferred practice. These changes were not made to address any prior art, and no new matter has been added to the claims. Applicant submits that these clarifications address the examiner's 35 USC 112 concerns and Applicant requests that the examiner withdraw the objection to Claims based on 35 USC 112.

Claim 1 has been amended by:

- Clarifying that the tear-open strips are attached to the continuous film web before the blanks are severed as step a).
- Moving the step of severing the blank for the outer wrapper from a continuous film web from the preamble to the main body of the claim as step b).
- Deleting that the tear-open strips are fixed to the film web as a continuous material strip as the tear-open strips also can be made of sections that have been cut from the continuous material strip, as shown in FIG. 3.
- Original step a) now is step c).
- Original step b) now is step d) and clarifying that the sensing of the printing or markings of the tear-open strip is done after the tear-open strips are attached to the film web.
- Original step c) now is step e) and clarifying that the controlling of the severing cut is done in accordance with the detected printing or markings of the tear-open strips.

No new matter has been added.

Claim 6 has been amended by:

- Clarifying that the apparatus produces tear-open strips with precisely positioned printing or markings from a material web.
- Has a printed-mark reader to sense the printing or markings.
- Has an evaluation unit connected to the printed-mark reader for evaluating the positions of the printing or markings.

- Has drive elements for moving the film web, the drive elements being controlled by the positioning of the printing or markings as sensed by the printed-mark reader and evaluated by the evaluation unit.

No new matter has been added.

Contrary to the teachings of the prior art, Claim 1 now clarifies that the sensing of the printing or markings is done after the tear-open strips have been fixed to the film web. Further, the prior art does not show tear-open strips having a printing, which has to be positioned in an exact relative position on the cut blanks for the outer wrapper. Additionally, the prior art does not show the sensing of printing or markings on the tear-open strips. Claim 6 now clarifies that the apparatus is structured to produce cigarette packs such as those claimed in Claim 1.

New Claim 21 is a rewrite of Claim 1 clarifying the steps contained in Claim 1. No new matter has been added.

New Claim 22 is a rewrite of Claim 6 clarifying the components contained in Claim 6 and their structural relationship to each other. No new matter has been added.

2. Reinstatement of Withdrawn Claims.

Applicant submits that Claims 1, 6, 21, and 22 are allowable and generic and that the withdrawn claims should be reinstated. Specifically, under 37 CFR 1.142(b): Claims to the invention or inventions not elected, if not canceled, are nevertheless withdrawn from further consideration by the examiner by the election, subject however to reinstatement in the event the requirement for restriction is withdrawn or overruled.

Upon the reinstatement of Claims 2-5 and 7-20, Applicant will review and amend these claims as necessary to place them in better form relative to USPTO preferences.

Should Claims 21 and 22 be deemed allowable, Applicant reserves the right to add new dependent claims that depend from Claims 21 and 21 that are based on Claims 2-5 and 7-20, respectively.

3. Explanation of the Invention Relative to the Current State of the Art.

The present invention relates to a process and apparatus for producing outer wrappers for items such as cigarette packs. The outer wrapper consists of a film,

typically a transparent film, that is processed in a packaging machine as a continuous film web. A tear-off strip, which is later used to open the outer wrapper, is attached to the continuous film web. This generally is known in the art.

A feature of the present invention is that the tear-off strip comprises printing or markings. The printing can take the form of decorative elements, written notices, or the like. The markings can take the form of printing marks, colored highlights, colored grip ends, or the like. During the production of the outer wrapper, a material strip having the appropriate and desired printing material is applied to the continuous film web. Then, individual outer wrapper blanks with tear-off strips are severed from the film web.

One problem addressed by the present invention is a way to ensure that the printing on the tear-off strip is located at a predetermined position within the outer wrapper when the outer wrapper is applied to the pack. For example, it may be desired to position text information proximal to the pack's front side to gain the immediate attention of the consumer. In another example, it may be desired to position the tear-strip grip tab proximal to the narrow side surface or the edge of the pack.

To solve this problem, the present invention uses a printed-mark reader that senses (detects) the printing or markings on the tear-off strip. This information (that is, the detecting of the printing or markings) is evaluated and used to position the tear-off strip correctly on the film web, thus ensuring the desired positioning of the printing on the outer wrapper. For example, as shown in FIG. 2, the severing of the blanks after the material strip for the tear-off strip has been applied to the film web is controlled in accordance with the sensed printing on the tear-off strip.

Alternatively or additionally, the material feed of the film web and/or the material strip also can be controlled based on the sensed printing on the tear-off strip. For example, this would be advantageous when the film web also has printed matter or markings, as shown in FIGs. 3 and 4. Here, the printing is applied on the film web at repeated spaced intervals, thus establishing the arrangement of the severing cuts. In this example, the relative position of the printing on the tear-off strip is very important, as the printing on the tear-off strip not only must assume the correct position relative to the severing cut, but also must be in the correct position relative to the printing on the film web. By virtue of a printed-mark reader, the printing of the tear-off strip is evaluated and compared to the relative position of the

film web, which is obtained by scanning the corresponding printed markings on the film web using a separate printed-mark reader. As can be seen in the FIGs., this is performed after the tear-off strip has been applied to the film web. During the evaluation, if the comparison of the relative positions of the tear-off strip and the film web detects a faulty positioning, the control of the material feed for the film web and/or the material strip is corrected to correct this faulty positioning. Because the correction is conditioned by the control of the printed marks after the material strip has been applied to the film web, the compensated relative positions take effect only on the subsequently produced blanks, and several faulty positioned blanks do arise. However, this approach also permits high process speeds when manufacturing the blanks for the outer wrappers.

The difference between the exemplary embodiments shown in FIGs. 3 and 4 is that in the exemplary embodiment shown in FIG. 3 the tear-off strip is applied to the film web as a continuous material strip, while in the exemplary embodiment shown in FIG. 4 the material strip is first severed into sections that then are positioned correctly on the film web. However, the sensing of printing or markings on the tear-off strips for the purpose of controlling the relative position of the tear-off strip and its printing on the blank for the outer wrapper are common to all embodiments, making Claims 1, 6, 20 and 21 generic.

4. 35 USC 103 Rejections.

Claims 1, 6, 21, and 22, as well as Claims 2-5 and 7-20, of the present patent application are not obvious over US Patent No. 5931292 to Focke (Focke '292) in view of US Patent No. 5470300 to Terranova (Terranova '300) because the present invention is patentably distinct over the cited patents and any combination of the cited patents. More specifically, the present process and apparatus is functionally and structurally nonobvious over the combination of references. As clarified, the claims disclose and claim a process and apparatus patentably distinct from the cited art, both in function and in structure.

For a claim to be determined obvious (or nonobvious) under 35 USC 103, the claimed material must have been obvious to person of ordinary skill in the art from the prior art. An obviousness determination requires examining (1) the scope of the prior art, (2) the level of skill in the art, and (3) the differences between the prior art and Applicant's invention. *Litton Systems, Inc. v. Honeywell, Inc.*, 117 SCt 1270

(1970). A mere suggestion to further experiment with disclosed principles would not render obvious an invention based on those principles. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 19 USPQ2d 1432 (Fed. Cir. 1991). In fact, an applicant may use a reference as a basis for further experimentation and to create the invention. *Id.*

The fact that each element in a claimed invention is old or unpatentable does not determine the nonobviousness of the claimed invention as a whole. See *Custom Accessories, Inc., v. Jeffrey-Allan Industries*, 1 USPQ2d 1196 1986 (Fed. Cir. 1986). The prior art must not be given an overly broad reading, but should be read in the context of the patent specifications and *as intended by reference authors*. *Durling v. Spectrum Furniture Co.*, 40 USPQ2d 1788 (Fed Cir 1996) (Federal Circuit held that district court erred by giving a "too broad an interpretation" of claims in a sofa patent to invalidate another on the nonobviousness standard).

The Federal Circuit has made it clear that the nonobviousness standard is applied wrongly if a court or an examiner (1) improperly focuses on "a combination of old elements" rather than the invention as a whole, (2) ignores objective evidence of nonobviousness, (3) pays lip service to the presumption of validity, and (4) fails to make sufficient *Graham* findings. *Custom Accessories, Inc.*, 1 USPQ2d 1196 (Fed. Cir. 1986). Applying the nonobviousness test counter to these principles counters the principle that a patent application is presumed nonobvious. *Id.*

To sustain a rejection under 35 USC 103, the examiner must establish *aprima facie* case of obviousness. MPEP §2142. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2143. This is not the case with the cited art.

Focke '292 discloses an outer wrapper made of transparent film that has a tear off strip. However, neither the tear-off strip nor the film disclosed in Focke '292 has any printing on it, in contrast to the present invention. In this respect, Focke '292 does not address the technical problem on which the present invention is based. Rather, the tear-off strip disclosed in Focke '292 can be freely attached to the material web without any need to take into account a relative position with respect to the severing of blanks. There is no disclosure or teaching of anything related or relevant to printing or marking a tear-off strip for any purpose, let alone for the purpose of controlling the relative position of the tear-off strip and its printing on an outer wrapper blank to cover packs, in Focke '292.

Terranova '300 discloses the use of printed marks and printed-mark readers for

the control of a severing cut for severing individual blanks from a continuous material web for manufacturing plastic bags. Terranova '300 merely discloses the use of a printed-mark reader associated with a material web or film and does not discuss or disclose the problem addressed or solution claimed in the present patent application. More specifically, Terranova '300 does not even relate to the field of the present invention (producing plastic bags that you do not want to rip versus producing tear-off strips for wrappers that you do want to rip) or to the control of the relative position of a material strip that is attached to a continuous film web and that is used as an opening aid for a film wrapper. As Terranova '300 does not disclose any material strips attached to the film web, Terranova '300 does not need to and does not address the problem of coordinating the printing of the tear-strip with the printing on the film web.

Further, those of ordinary skill in the art would not combine Focke '292 (and other patents in the filed relating to outer wrappers having a tearstrip) with Terranova '300 (and other patents in the field of producing plastic bags). Even, for the sake of argument only, if someone of ordinary skill in the art did have Focke '292 and Terranova '300 before them, they would not arrive at the present invention. Specifically, the most likely result of a combination of Focke '292 and Terranova '300 would be to provide the Focke '292 film web with a Terranova '300 printed mark to be scanned with a printed-mark reader. This would not have resulted in the positioning of a tear strip or material strip relative to a film web, as neither Focke '292 nor Terranova '300 disclose this information.

The combination of Focke '292 and Terranova '300 does not result in the present invention and, without using the present invention as a hindsight tool, fails in every respect to lead to the present invention. Thus, without Applicant's disclosure of the inventive step, one of ordinary skill would not have designed a process or apparatus in which tear-off strips comprise printing or markings for the purpose of controlling the relative position of the tear-off strip and its printing on an outer wrapper blank to cover packs.

In summary, the present invention is not obvious over the cited art because it is a patentably distinct invention that is combination of features not disclosed by the prior art. As such, Applicant's requests that the examiner withdraw the rejection to Claims 1 and 6.

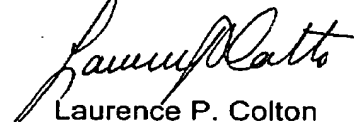
CONCLUSION

Applicant believes it has fully addressed the examiner's concerns and the claims are in condition for allowance, and Applicant respectfully requests such action.

Applicant further requests that the examiner reinstate Claims 2-6 and 7-20 as Claims 1 and 6 are generic regarding at least having tear-off strips that comprise printing or markings for the purpose of controlling the relative position of the tear-off strip and its printing on an outer wrapper blank to cover packs.

If the examiner has any final concerns that can be addressed over the telephone, the examiner is invited to contact the below-signed attorney of record.

Respectfully submitted,
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